

## APPENDIX A TO PART 43, MAJOR ALTERATIONS, MAJOR REPAIRS, AND PREVENTIVE MAINTENANCE.

7. Revise Appendix A to read as follows:

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(b) \* \* \*

(1) Airframe major repairs. Repairs to the following parts of an airframe and repairs of the following types, involving the strengthening, reinforcing, splicing, and manufacturing of primary structural members or their replacement, when replacement is by fabrication such as riveting, welding, or bonding, are major repairs.

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(xxii) Repair of a damaged area in non-pressurized stressed coverings made of metal or plywood where the damaged or removed material exceeds 6 inches in any direction or when a repair is within 3 inches of another repair.

(xxiii) Repair of a pressurized vessel.

(xxiv) Repair of a damaged area in a composite or chemically milled structure.

(xxv) Repair of portions of skin sheets by making additional seams.

(xxvi) Repair of three or more adjacent wing or control surface ribs or the leading edge of wings and control surfaces, between such adjacent ribs.

(xxvii) Repair of a fabric covering involving an area extending beyond two adjacent ribs.

(xxviii) Repair of fabric on fabric covered parts such as wings, fuselages, stabilizers, and control surfaces.

(xxix) Repair of a removable or integral fuel tank or oil tank.

(xxx) Repairs involving strengthening, splicing, reinforcing, or blendouts on life limited primary structure.

(2) Powerplant major repairs. Repairs of the following parts of an engine and repairs of the following types are major repairs:

(i) Assembly of a crankcase or crankshaft of a reciprocating engine equipped with an integral supercharger.

(ii) Assembly of a crankcase or crankshaft of a reciprocating engine equipped with other than spur-type propeller reduction gearing.

(iii) Repair of a structural engine part by any method other than those contained in the maintenance manual or type certificate holder's instructions for continued airworthiness.

(3) Propeller and governor major repairs. Repairs of the following types, excluding the treatment of surface corrosion and application of protective coating, are major repairs:

- (i) Repair of a steel hub or blade.
- (ii) Straightening or shortening of blades.
- (iii) Retipping and/or replacing tip fabric of wood blades and fixed-pitch wood propellers.
- (iv) Replacement of plastic covering and/or repairs to wood composition blades.
- (v) Replacement of outer laminations or inlay work on wood blades and fixed-pitch wood propellers.
- (vi) Repair of elongated bolt holes in the hub of fixed-pitch wood propellers.
- (vii) Repair of a composite blade beyond the type certificate holder's recommendations for field repair.
- (viii) Repair of propeller governors.
- (ix) Overhaul of controllable pitch propellers.
- (x) Repairs such as deep dents, cuts, scratches, scars, and nicks in aluminum blades.
- (xi) Repair and/or replacement of internal elements of hubs and blades.

(4) Appliance major repairs. Repairs of the following types are major repairs:

- (i) Repairs not made in accordance with the recommendations of the applicable type certificate holder or in accordance with an FAA Airworthiness Directive.
- (ii) Calibration or repair of instruments, excluding direct reading compasses.
- (iii) Calibration of radio equipment.

(c) Preventive maintenance. Preventive maintenance is limited to the following work, provided it does not involve complex assembly operations or the assembly of any primary structure or operating system:

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(7) Servicing deicing fluid and servicing hydraulic fluid in nonpressurized hydraulic reservoirs.

(8) Making simple fabric patches not requiring rib stitching.

(9) Repairing or refinishing the decorative coatings of—

(i) A fuselage, wing, and tail group;

(ii) A balloon basket;

(iii) The fairings and cowlings;

(iv) The landing gear;

(v) The cabin and/or cockpit interior;

(vi) The upholstery; and

(vii) Any nonstructural cover plates.

(10) Applying preservative or protective material to components or parts.

(11) Making small fabric repairs to a balloon envelope not requiring load tape repair or replacement.

(12) Making small, simple repairs to fairings, cowlings, and small patches and reinforcements not changing the contour so as to interfere with proper air flow.

(13) Replacing the side windows on nonpressurized aircraft, where the work does not interfere with the structure or any operating system, for example, controls and electrical equipment.

(14) Replacing seats, restraint belts, or seat parts.

(15) Troubleshooting and repairing broken circuits in landing light wiring circuits.

(16) Replacing bulbs, reflectors, or lenses of position and landing lights.

(17) Replacing wheels with skis or skis with wheels, where no weight and balance computation is involved.

(18) Replacing any cowlings not requiring removal of the propeller or disconnection of flight controls.

(19) Replacing or cleaning spark plugs and setting the spark plugs gap clearance.

(20) Replacing any hose connection, except hydraulic connections.

- (21) Replacing prefabricated fuel lines.
- (22) Cleaning or replacing fuel and oil strainers or filter elements or changing engine oil.
- (23) Replacing nickel cadmium (NICAD) or lead-acid batteries and servicing lead-acid batteries.
- (24) Cleaning the balloon-burner pilot and main nozzles.
- (25) Replacing or adjusting nonstructural standard fasteners.
- (26) Interchanging balloon baskets and burners on envelopes when specifically designed for quick removal and installation.
- (27) Removing, checking, and replacing magnetic chip detectors.
- (28) The inspection and maintenance tasks prescribed and identified specifically as preventive maintenance in a primary category aircraft type certificate or supplemental type certificate holder's approved special inspection and preventive maintenance program when accomplished on a primary category aircraft provided the inspection and maintenance tasks are:
  - (i) Performed by the holder of at least a private pilot certificate issued under 14 CFR part 61 of this chapter who is the registered owner (including co-owners) of the affected aircraft and who holds a certificate of competency for the affected aircraft issued by—
    - (A) A school approved under 14 CFR § 147.21(e) of this chapter;
    - (B) The holder of the production certificate for that primary category aircraft that has a special training program approved under 14 CFR § 21.24 of this subchapter; or
    - (C) Another entity that has a course approved by the Administrator; and
  - (ii) Performed in accordance with instructions contained in the special inspection and preventive maintenance program approved as part of the aircraft's type design or supplemental type design.
- (29) Removing and replacing self-contained, front instrument panel-mounted navigation and communication devices that use tray-mounted connectors to connect the unit to the instrument panel (excluding automatic flight control systems, transponders, and microwave frequency distance measuring equipment (DME)). The approved unit must be designed to be readily and repeatedly removed and replaced, and pertinent instructions must be provided. Before the unit's intended use, an operational check must be performed.

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(30) Updating self-contained, front instrument panel-mounted air traffic control navigational software data bases (excluding those for automatic flight control systems, transponders, and microwave frequency DME) provided no disassembly of the unit is required and pertinent instructions are provided. Before the unit's intended use, an operational check must be performed